

APPROVED

for
PTO DEPOSIT ACCOUNT CHARGE
ACCOUNT #04-1700

EL988725766US

Deposited on:

11/17/2003

DUNLAP, CODDING & ROGERS, P.C.

PTO/SB/21 (08-00)
Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE**TRANSMITTAL
FORM**

(to be used for all correspondence after initial filing)

| | |
|------------------------|--------------------------|
| Application Number | 09/988,847 |
| Filing Date | 11/19/2001 |
| First Named Inventor | Daniel E. Resasco et al. |
| Group Art Unit | 1754 (Conf. No. 9377) |
| Examiner Name | S. Hendrickson |
| Attorney Docket Number | 5820.615 |

Total Number of Pages in This Submission

ENCLOSURES (check all that apply)

- ☒ Fee Transmittal Form
☐ Fee Attached
☐ Amendment / Reply
☐ After Final
☐ Affidavits/declaration(s)
☐ Extension of Time Request
☐ Express Abandonment Request
☒ Information Disclosure Statement
☐ Certified Copy of Priority Document(s)
☐ Response to Missing Parts/
Incomplete Application
☐ Response to Missing Parts
under 37 CFR 1.52 or 1.53

- ☐ Assignment Papers
(for an Application)
☐ Drawing(s)
☐ Licensing-related Papers
☐ Petition
☐ Petition to Convert to a
Provisional Application
☐ Power of Attorney, Revocation
Change of Correspondence
Address
☐ Terminal Disclaimer
☐ Request for Refund
☐ CD, Number of CD(s) _____

- ☐ After Allowance Communication
to Group
☐ Appeal Communication to Board
of Appeals and Interferences
☐ Appeal Communication to Group
(Appeal Notice, Brief, Reply Brief)
☐ Proprietary Information
☐ Status Letter
☒ Other Enclosure(s) (please
identify below):

See remarks below:

Remarks

1. Transmittal (1 page);
2. Fee Transmittal (1 page) Authorizing the Commissioner to charge indicated fees of \$180.00 (which includes \$180.00 for Submission of IDS) and any additional fee required and/or credit any overpayments to Deposit Account Dunlap, Coddling & Rogers, P.C.;
3. Supplemental Information Disclosure Statement (3 pages);
4. Supplemental Form PTO-1449 (2 pages);
5. Copies of cited material; and
6. Return Receipt Postcard

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

| | |
|-------------------------------|---|
| Firm or Individual name | DUNLAP, CODDING & ROGERS, P.C., Customer Number 30589 P. O. Box 16370, Oklahoma City, Oklahoma 73113; Christopher W. Corbett |
| Signature | |
| Date | 11/17/03 |

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail or U.S. Express mail no. EL988725766US in an envelope addressed to the address below on this date: 11/17/2003

| | |
|-----------------------|---|
| Typed or printed name | Christopher W. Corbett, Reg. No. 36,109 |
| Signature | |

Date 11/17/03

SEND TO: Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

APPROVED

for

Express Mail No.: EL988725766US

PTO DEPOSIT ACCOUNT CHARGE

Date Deposited: 11/17/2003

ACCOUNT# 04-1700

PTO/SB/17 (10-02)

Approved for use through 10/31/2002. OMB 0651-0032

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

DUNLAP, CODDING & ROGERS, P.C.

FEE TRANSMITTAL

NOV 17 2003

for FY 2003

Patent fees are subject to annual revision.

Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT

(\$ 180)

Complete if Known

| | |
|----------------------|--------------------------|
| Application Number | 09/988,847 |
| Filing Date | 11/19/2001 |
| First Named Inventor | Daniel E. Resasco et al. |
| Examiner Name | S. Hendrickson |
| Art Unit | 1754 |
| Attorney Docket No. | 5820.615 |

METHOD OF PAYMENT (check all that apply)
☐ Check ☐ Credit card ☐ Money Order ☐ None
☒ Deposit Account:

Deposit Account Number

04-1700

Deposit Account Name

Dunlap, Coddling & Rogers, P.C.
Customer No. 30589

The Commissioner is authorized to: (check all that apply)

☒ Charge fee(s) indicated below ☒ Credit any overpayments☒ Charge any additional fee(s) during the pendency of this application☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.**FEE CALCULATION****1. BASIC FILING FEE**

| Large Entity | | Small Entity | | Fee Description | Fee Paid |
|--------------|----------|--------------|----------|------------------------|----------|
| Fee Code | Fee (\$) | Fee Code | Fee (\$) | | |
| 1001 | 770 | 2001 | 385 | Utility filing fee | |
| 1002 | 340 | 2002 | 170 | Design filing fee | |
| 1003 | 530 | 2003 | 265 | Plant filing fee | |
| 1004 | 770 | 2004 | 385 | Reissue filing fee | |
| 1005 | 160 | 2005 | 80 | Provisional filing fee | |

SUBTOTAL (1) (\$ 0)

2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

| Total Claims | | Extra Claims | | Fee from below | | Fee Paid | |
|--------------------|--|--------------|--|----------------|--|----------|-----|
| Independent Claims | | ** = | | X | | = | \$0 |
| Multiple Dependent | | ** = | | X | | = | \$0 |

| Large Entity | | Small Entity | | Fee Description | Fee Paid |
|--------------|----------|--------------|----------|--|----------|
| Fee Code | Fee (\$) | Fee Code | Fee (\$) | | |
| 1202 | 18 | 2202 | 9 | Claims in excess of 20 | |
| 1201 | 86 | 2201 | 43 | Independent claims in excess of 3 | |
| 1203 | 290 | 2203 | 145 | Multiple dependent claim, if not paid | |
| 1204 | 86 | 2204 | 43 | ** Reissue independent claims over original patent | |
| 1205 | 18 | 2205 | 9 | ** Reissue claims in excess of 20 and over original patent | |

SUBTOTAL (2) (\$ 0)

**or number previously paid, if greater; For Reissues, see above

FEE CALCULATION (continued)**3. ADDITIONAL FEES**

Large Entity Small Entity

| Fee Code | Fee (\$) | Fee Code | Fee (\$) | Fee Description | Fee Paid |
|----------|----------|----------|----------|--|----------|
| 1051 | 130 | 2051 | 65 | Surcharge - late filing fee or oath | |
| 1052 | 50 | 2052 | 25 | Surcharge - late provisional filing fee or cover sheet | |
| 1053 | 130 | 1053 | 130 | Non-English specification | |
| 1812 | 2,520 | 1812 | 2,520 | For filing a request for <i>ex parte</i> reexamination | |
| 1804 | 920* | 1804 | 920* | Requesting publication of SIR prior to Examiner action | |
| 1805 | 1,840* | 1805 | 1,840* | Requesting publication of SIR after Examiner action | |
| 1251 | 110 | 2251 | 55 | Extension for reply within first month | |
| 1252 | 420 | 2252 | 210 | Extension for reply within second month | |
| 1253 | 950 | 2253 | 475 | Extension for reply within third month | |
| 1254 | 1,480 | 2254 | 740 | Extension for reply within fourth month | |
| 1255 | 2,010 | 2255 | 1,005 | Extension for reply within fifth month | |
| 1401 | 330 | 2401 | 165 | Notice of Appeal | |
| 1402 | 330 | 2402 | 165 | Filing a brief in support of an appeal | |
| 1403 | 290 | 2403 | 145 | Request for oral hearing | |
| 1451 | 1,510 | 1451 | 1,510 | Petition to institute a public use proceeding | |
| 1452 | 110 | 2452 | 55 | Petition to revive - unavoidable | |
| 1453 | 1,330 | 2453 | 665 | Petition to revive - unintentional | |
| 1501 | 1,330 | 2501 | 665 | Utility issue fee (or reissue) | |
| 1502 | 480 | 2502 | 240 | Design issue fee | |
| 1503 | 640 | 2503 | 320 | Plant issue fee | |
| 1460 | 130 | 1460 | 130 | Petitions to the Commissioner | |
| 1807 | 50 | 1807 | 50 | Processing fee under 37 CFR 1.17(q) | |
| 1806 | 180 | 1806 | 180 | Submission of Information Disclosure Stmt | 180 |
| 8021 | 40 | 8021 | 40 | Recording each patent assignment per property (times number of properties) | |
| 1809 | 770 | 2809 | 385 | Filing a submission after final rejection (37 CFR 1.129(a)) | |
| 1810 | 770 | 2810 | 385 | For each additional invention to be examined (37 CFR 1.129(b)) | |
| 1801 | 770 | 2801 | 385 | Request for Continued Examination (RCE) | |
| 1802 | 900 | 1802 | 900 | Request for expedited examination of a design application | |

Other fee (specify)

*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$ 180)

SUBMITTED BY

(Complete if applicable)

Name (Print/Type)

Christopher W. Corbett

Registration No.
(Attorney/Agent)

36,109

Telephone (405) 607-8600

Signature

Date

11/17/2003

SEND TO:

Commissioner for Patents
PO Box 1450, Alexandria, VA 22313-1450

EXPRESS MAIL NO.: EL988725766US
Deposited On: November 17, 2003



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No. : 09/988,847 Confirmation No.: 9377
Applicant(s) : Daniel E. Resasco, Boonyarach Kitiyanan,
Jeffrey H. Harwell and Walter Alvarez
Filed : 11/19/2001
TC/A.U. : 1754
Examiner : S. Hendrickson
Title : METALLIC CATALYTIC PARTICLE FOR
PRODUCING SINGLE-WALLED CARBON
NANOTUBES

Docket No. : 5820.615
Customer No. : 30589

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

**List of Sections Forming Part of This
Information Disclosure Statement**

The following sections are being submitted for this Information Disclosure Statement:

1. [X] Preliminary Statements
2. [X] FORM PTO-1449 (Modified)
3. [] Statement as to Information Not Found in Patents or Publications
4. [X] Copies of Listed Information Items Accompanying this Statement

5820.615 Supplemental IDS.wpd

11/20/2003 ZJU HAR1 00000109 041700 09988847

01 FC:1806 180.00 DA

5. ☒ Identification of Person(s) Making this Information Disclosure Statement

Section 1. Preliminary Statements

Applicants submit herewith patents, publications or other information of which they are aware, which they believe may be material to the examination of this application and in respect of which there may be a duty to disclose.

The filing of this information disclosure statement shall not be construed as a representation that a search has been made (37 C.F.R. § 1.97(g)), an admission that the information cited is, or is considered to be, material to patentability or that no other material information exists.

The filing of this information disclosure statement shall not be construed as an admission against interest in any manner. Notice of January 9, 1992, 1135 O.G. 13-25, at 25.

Section 2. Form PTO-1449 (Modified)

☒ A completed Form 1449 (Modified) is attached hereto.

☐ No Form 1449 (Modified) is attached.

Section 3. Statement as to Information Not Found in Patents or Publications (Information Not Listed in Form PTO-1449)

Section 4. Copies of Listed Information Items Accompanying this Statement


Legible copies of all items listed in Form PTO-1449 (Modified) accompany this information disclosure statement.

Section 5. Identification of Person(s) Making this INFORMATION DISCLOSURE STATEMENT

The person making this statement is the attorney who signs below on the basis of the information:

- ☐ supplied by the inventor(s)
- ☐ supplied by an individual associated with the filing and prosecution of this application (37 C.F.R. § 1.56(c)).
- ☐ in the attorney's file
- ☒ provided in the International Search Report cited herein

Respectfully submitted,



Christopher W. Corbett, Reg. No. 36,109
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Oklahoma City, Oklahoma 73113
(405) 607-8600 - telephone
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Agent for Applicant(s)

Express Mail: EL988725766US
Date Deposited: 11/17/2003



Page 1 of 2

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

| C mplete if Known | |
|------------------------|--------------------------|
| Application Number | 09/988,847 |
| Filing Date | 11/19/2001 |
| First Named Inventor | Daniel E. Resasco et al. |
| Group Art Unit | 1754 |
| Examiner Name | S. Hendrickson |
| Attorney Docket Number | 5820.615 |

(use as many sheets as necessary)

U. S. PATENT DOCUMENTS

| EXAM INIT. | Cite No. 1 | U.S. PATENT NUMBER Number | Kind Code2 (if known) | Name of Patentee or Applicant of Cited Document | Date of Publication of Cited Document MM- DD-YYYY | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear |
|---------------|---------------|------------------------------|-----------------------------|--|---|--|
| | | | | | | |
| | | | | | | |

FOREIGN PATENT DOCUMENTS

| EXAM INIT. | Cite No. 1 | Foreign Patent Document Kind Code5 Office 3 Number 4 (if known) | Name of Patentee or Applicant of Cited Document | Date of Publication of Cited Document MM- DD-YYYY | Pages, Columns, Lines Lines, Where Relevant Passages or Relevant Figures Appear |
|---------------|------------------|---|--|---|--|
| | | PCT/US02/23155 | PCT International Search Report | 07/21/2003 | |
| | | WO 00/73205 A1 | PCT | 12/07/2000 | |
| | | | | | |

NON PATENT DOCUMENTS

| EXAM INIT. | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published |
|---------------|---|
| | ALVAREZ, ET AL., "Synergism of Co and Mo in the catalytic production of single-wall carbon nanotubes by decomposition of CO", <i>Elsevier Science Ltd.</i> , Carbon 39 (2001), pp. 547-558. |
| | BANDOW ET AL., "Effect of the Growth Temperature on the Diameter Distribution and Chirality of Single-Wall Carbon Nanotubes", <i>The American Physical Society, Physical Review Letters</i> , Vol. 80, No. 17, (1998), pp. 3779-3782 |

| EXAM INIT. | <p align="center">NON PATENT DOCUMENTS</p> <p align="center">Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published</p> | |
|---|---|---|
| | | <p>CHATURVEDI ET AL., "Properties of pure and sulfided NiMoO₄ and CoMoO₄ catalysts: TPR, XANES and time-resolved XRD studies", Database Accession No. EIX99044490981 XP002246342, Proceedings of the 1997 Mrs Fall Symposium, Boston, MA, USA, December 2-4, 1997; Mater Res Soc Symp Proc, Materials Research Society Symposium-Proceedings, Recent Advances in Catalytic Materials, 1998, Mrs. Warrendale, PA, USA.</p> |
| | | <p>DE BOER ET AL., "The cobalt-molybdenum interaction in CoMo/SiO₂ catalysts: A CO-oxidation study", <i>Elsevier Science Ltd.</i>, Solid State Ionics 63-65 (1993), pp. 736-742.</p> |
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| | | |
| EXAMINER | | DATE CONSIDERED |
| <p>EXAMINER: Initial if citation considered, whether or not citation is in conformance and not considered. Include copy of this form with next communication to applicant. **Place of Publication refers to name of publication in which the information was published.</p> | | |